

skeptical of complaints about mergers and acquisitions lodged by horizontal competitors because an exercise of market power will generally lead to an increase in market price benefiting the competitor. However, an increase in efficiency will harm the competitor and lead to complaints that are not in the public interest.

Moreover, the proposed acquisition does not foreclose any partner or vertical supplier for Southern Linc. Southern Linc's customers do not roam onto the existing stand-alone Motorola dispatch systems today. Thus, the acquisition will not foreclose any Southern Linc roaming.

Leaving the Motorola spectrum to inefficient 900 MHz stand-alone analog systems scattered across the country will not provide much competition to Southern Linc. But using it to bolster Nextel's advanced service offerings will benefit consumers and harm competitors by forcing them to invest more in serving consumers.

B. Spectrum is a Key Resource for CMRS Competitors

Nextel has used its spectrum to establish a national footprint and become a major competitor in the CMRS market, where it offers an integrated package of mobile interconnect, dispatch, wireless Internet and other services. In the CMRS market, Nextel competes directly with the integrated service offerings of Sprint PCS, AT&T Wireless, Cingular Wireless, Verizon Wireless, VoiceStream and others. Nextel has been an innovative competitor in the CMRS market, offering enhanced dispatch capabilities, billing options (no roaming charges, per second billing), and new features (such as wireless Internet services) that have spurred competitive service offerings from other CMRS providers.

Spectrum is a critical resource for competition in the CMRS market. Nextel is limited in spectrum compared to its main rivals; it has on average about 20 MHz of non-contiguous spectrum in each geographic area, whereas its major competitors have significantly more spectrum.⁷ Table 1 shows the total spectrum (in MHz) used by the largest CMRS providers for the major urban areas analyzed by Southern Linc.⁸ The table considers 120 MHz of PCS spectrum, 50 MHz of cellular spectrum, 26.5 MHz of 800 MHz SMR spectrum (including 430 SMR and General Category channels and 100 business and industrial/land transportation pool channels), 5 MHz of 900 MHz SMR spectrum, 1.55 MHz of 220 MHz spectrum, and 6 MHz of 700 MHz Guard Band spectrum.

Nextel controls only a small fraction of the total CMRS spectrum, and has no more than the fifth most spectrum in any geographic area. For example, Verizon has 45 MHz in 5 of the nine major urban areas in Table 1. AT&T has 30 MHz or more in every one of the 9 areas. Nextel is not close in any market, with a maximum of 23.9 MHz non-contiguous spectrum. Nextel's acquisition of Motorola's 900 MHz licenses is an attempt by Nextel

⁷ The lack of non-contiguous spectrum apparently makes some technologies such as wide-band CDMA unavailable.

⁸ Affidavit of Michael G. Baumann and Stephen E. Siwek, February 8, 2001.

to achieve some of the same economies of operation as its competitors, and should lead to increased competition in the CMRS market.

The participation of Nextel's major competitors in the recent C & F block re-auction (auction no. 35) provides some market evidence that CMRS providers highly value additional spectrum. For example, three companies, Verizon, AT&T Wireless (through its affiliate Alaska Native Wireless), and Cingular (through its affiliate Salmon PCS) all were bidding for the three 10 MHz PCS licenses in New York. Verizon apparently wanted (and won) two of the 10 MHz blocks to complement its 25 MHz cellular license in the area. This gives Verizon a total of 45 MHz. At the same time, AT&T and Cingular each wanted a single 10 MHz license to complement the 10 MHz PCS license each already has in the area; in AT&T's case to add to the 25 MHz cellular license it holds in New York. As a result, the bidding for the New York licenses went over \$2 billion for each of two 10 MHz licenses as each of the three bidders wanted a total of 20 MHz of PCS spectrum.⁹

C. Public Interest Benefits of Nextel's Prior Spectrum Acquisitions

Many of Southern Linc's arguments that the acquisition is contrary to the public interest have been raised in opposition to prior Nextel spectrum acquisitions. However, Nextel's use of spectrum from these acquisitions shows that it has significantly increased the efficient use of SMR spectrum and expanded output rather than restricted output, which would be a hallmark of anticompetitive behavior. Nextel has taken underutilized spectrum, invested significantly in technology, substantially increased the number of users supported on the spectrum, and given those users enhanced functionality.

Nextel's digital iDEN technology alone—without regard to the efficiencies gained through multiple-site channel re-use—increases spectrum use by a factor of six on Nextel's dispatch service and by a factor of three on its interconnected mobile telephone service. Nextel has also invested substantial money in converting its systems to a low-power cellular network architecture to increase capacity further.¹⁰ This increase in efficiency has led to much greater use of the 800 MHz spectrum. Prior to the introduction of digital technology, the entire 800 MHz SMR industry had about two million users.¹¹ Today, Nextel alone has nearly seven million users¹² and there are almost 1.3 million additional SMR users on these bands outside of Nextel.¹³

⁹ The third 10 MHz license sold for "only" \$1.5 billion because it was a protected license that only "small" businesses could bid upon. But bidders were rational in their substitution between licenses as "small" businesses received a 25% bidding credit for the non-protected licenses and the difference between the sales price of the protected license and non-protected licenses is explained by the bidding credit and bid increment.

¹⁰ According to Nextel, it had 12,700 cell sites nationwide as of Dec. 31, 2000.

¹¹ See Implementation of Section 6002(g) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Communication Mobile Services, First Report 10 FCC Rcd 8844 (1995) at para. 35, citing "The State of the SMR and Digital Mobile Radio" (1994 and 1995) at p. 138, EMCI, Jan. 1995.

The number of subscribers utilizing a given band of spectrum is one measure of output. Output can also be measured by the average minutes of use by subscribers. The available evidence suggests that Nextel subscribers use more minutes and higher quality minutes than do stand-alone dispatch subscribers. Nextel customers average 480 minutes of use per month.¹⁴ Approximately 53% of these minutes are used for interconnected mobile service, on which Nextel uses 3:1 compression, the remainder, 47%, are used for dispatch services where Nextel uses 6:1 compression. We can use this difference in compression to convert interconnected minutes of use into their equivalent in terms of dispatch-quality minutes. Because interconnected calls use twice the compression as dispatch, the effective number of dispatch quality minutes of use per average Nextel user is $(.53 \times 480 \times 2) + (.47 \times 480) = 734$ minutes.

Strategis provides some information about the usage behavior for stand-alone dispatch users.¹⁵ They claim that 60% of pure dispatch users make more than 100 calls per week. The typical duration of dispatch calls is very low, presumably much less than a minute, but for this purpose, if we assume that the typical length is one minute and the overall average is 100 minutes, the typical dispatch user would have about 433 dispatch minutes a month. This is less than the 480 minutes reported by Nextel and much less than the 734 quality-adjusted minutes calculated above.

Finally, it is important to consider whether consumers value the increased capacity and quality Nextel has made available for CMRS service. The evidence is that consumers are willing to pay for the increased quality by subscribing in substantially larger numbers. Gale and O'Brien develop a model to analyze the welfare effects of capacity reallocation.¹⁶ They examine a situation where a firm acquires "dual-use" capacity – capacity that can be used to provide either of two services. Their model assumes that the acquiring firm has the ability to raise prices in one market by redirecting capacity to another market. Even under these assumptions (that do not hold here), they find welfare benefits from the shift of capacity to a higher value service. Shifting capacity to a higher value use is exactly what Nextel proposes to do in the current acquisition.

IV. Competitive Effects in the CMRS Market

Southern Linc bases its arguments against the proposed acquisition on a narrowly defined trunked dispatch market. However, a wide variety of evidence demonstrates that dispatch

¹² See "Nextel Reports Record Year 2000 Financial Results," rel. Feb 16, 2001, www.nextel.com reporting 6.68 million domestic users as of Dec. 31, 2000.

¹³ The Strategis Group estimates 1,369,000 analog users on the 800 MHz band in 2000. Nextel has approximately 86,000 analog users on the 800 MHz band. The Strategis Group "The State of the SMR Industry: Nextel and Dispatch Communications" (Strategis Report) Sept. 2000, p. 4.

¹⁴ Strategis Report, p. 51.

¹⁵ Strategis Report, p. 66.

¹⁶ Gale, I. And O'Brien, D. "The Antitrust Implications of Capacity Reallocation by a Dominant Firm," *Journal of Industrial Economics*, *forthcoming*.

is not a separate and distinct market, but rather one service that can be offered by CMRS providers, and that Nextel competes in a broad CMRS market with cellular, PCS, SMR providers and other radio providers. Indeed, any CMRS or private provider can provide dispatch services, such as Nextel's Direct Connect®, whether they are operating in the cellular, PCS, SMR or other bands. Nextel's proposed acquisition of the Motorola licenses will allow it to better compete in the CMRS market.

A. Nextel Competes in a Broad CMRS Market

A first step in analyzing the competitive effects of a merger or acquisition is to define the relevant market. The Department of Justice/Federal Trade Commission Merger Guidelines framework for defining a relevant market focuses on demand substitution, i.e., the ability of consumers to substitute away from products that experience price increases. The focus is on the demand for the products in the marketplace, and not on the underlying technical characteristics of the products.

The guidelines start with a narrowly defined product and ask what would happen if a hypothetical monopolist of that product imposed a “small but significant and non-transitory increase in price.” If consumers can substitute to other products in such numbers that a price increase would not be profitable for the hypothetical monopolist, then the product group is expanded to include substitute products. The market definition process continues with expanded groups of products until a group of products is identified such that a hypothetical monopolist could profitably impose a hypothetical price increase.

Several features of the DOJ/FTC Guidelines approach are relevant for assessing the competitive effects of Nextel's proposed acquisition of the Motorola licenses. First, the relevant market should be defined based on the services, features and prices available to wireless consumers, and not on whether the spectrum used to provide the service was originally denominated and licensed as SMR, cellular or PCS spectrum. Second, the relevant market definition should account for the technological convergence and the removal of regulatory barriers that have blurred the distinctions between CMRS service providers using different parts of the spectrum. Third, since spectrum capacity is fungible and can be used to provide different services based on consumer demand, spectrum capacity is the appropriate metric for analyzing the CMRS market.

In a variety of proceedings, Congress, the Commission and the DOJ have recognized that all CMRS services are competitive or potentially competitive, and are, therefore, part of the same relevant market. Congress originally created the CMRS category in 1993 to recognize the competition between the different “categories” of mobile service providers and to encourage more competition among them by limiting regulatory disparities in the cellular, PCS and SMR rules and providing a level regulatory playing field.¹⁷ Since then, there has been substantial convergence in the services and features offered by providers

¹⁷ Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 107 Stat. 312 (1993)

using the cellular, PCS, SMR and other spectrum. The Commission has reported on the significant competition in the CMRS market in its annual wireless competition report.¹⁸

B. Nextel's Integrated Mobile Telephone/Dispatch Service

As discussed above, Nextel has built its iDEN network by using spectrum originally denominated as "SMR" and traditionally associated with dispatch services. Today, Nextel's main product is an integrated mobile voice and data offering that includes many functions in addition to dispatch functionality through the Direct Connect® feature. Nextel competes with other CMRS providers by offering an integrated solution for workgroup communication that significantly exceeds the functionality of a traditional dispatch service. Product features include one-to-many dispatch messaging, one-to-one private network interconnect, access to the PSTN, instant conferencing, paging, two-way text messaging, voice mail, call forwarding, POP3 compatible mobile e-mail, internet service, internet portal, and data applications including enterprise data applications—all accessed from the user's handset. Nextel has added a valuable service by bringing together purchasers and suppliers in certain industries within a single communications network—an initiative known as Nextel Business Networks.

By offering a broad wireless business solution, Nextel has been able to target "white-collar" mobile workgroups, which have not been the typical users of traditional dispatch services,¹⁹ as well as traditional dispatch mobile workgroups. Consistent with this targeting, Nextel is bringing to market advanced new features, created through partnerships with application software providers (such as ActSoft, Datatrac, Intermec, Airput and ClickSoftware) and online content providers (such as MSN and Amazon.com).²⁰ These new features will bring job tracking, scheduling, fleet management, employee timesheet, and specialized content functionality to their users phones. In addition, Nextel is partnering with personal data management application providers (such as Wireless Knowledge and IBM) to bring calendar, contact, and e-mail applications to their phones.²¹ Nextel also encourages development of a wide range of next-generation wireless enterprise applications for businesses ranging from medical services to the construction industry through the Nextel Developers Program, which currently consists of more than 200 organizations.²² Traditional dispatch represents only a fraction of Nextel's current and evolving product functionality.

¹⁸ In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Service, rel. Aug. 18, 2000 ("FCC Fifth Report").

¹⁹ Strategis Report, p. 53.

²⁰ Nextel Press Releases, Feb. 5, 2001, Feb 1, 2001, and Sept. 6, 2000.

²¹ Nextel Press Release, June 16, 2000, Sept. 25, 2000.

²² Nextel Press Release, June 16, 2000.

C. Integrated Mobile Telephone/Dispatch Services of Other CMRS Providers

Nextel's integrated package of mobile telephone and dispatch functions has pushed cellular and PCS providers to offer consumers similar integrated communications packages that include dispatch-like features. There are no regulatory or technical constraints preventing cellular or PCS providers from offering dispatch services. These providers can and do offer dispatch functionality in a number of ways. These include free or low-cost mobile-to-mobile or group calling plans, free or low-cost mobile-to-fixed line calling plans, product enhancements such as conference calling and speed dialing, handset features such as Qualcomm's Q-Chat, or network/handset programming features such as Ericsson's TDMA Pro product. These products and features can be used to achieve all of the functionality associated with traditional two-way radio/dispatch services along with mobile "cellular" service.

At present, Sprint, AT&T, Cingular and Verizon all market plans that allow unlimited free wireless-to-wireless communications among defined groups of up to 200, or (in the case of Cingular and Verizon) to all mobile customers in the local area. By using flat-rate pricing, these calling plans have erased one of the characteristics that traditionally defined a dispatch service: flat-rate (as opposed to per-time-unit) pricing. AT&T's "group calling" allows unlimited free calling between mobile units and up to five fixed-lines, thereby providing the base-station functionality that is also characteristic of dispatch services (note that a "mobile" unit could also function as a "base station").

These products are being aggressively developed and marketed by cellular and PCS manufacturers as a replacement for dispatch. AT&T, for example, markets its group calling option as follows: "With the quality, performance, security, and coverage of AT&T Group Calling, there's no longer a need to connect your workgroup with two-way radios or pagers..."²³ AT&T describes its group calling feature as "The Next Generation of Workgroup Communications", and states: "You can keep track of your delivery crew, field technicians, sales force, and dispatch personnel... This is ideal for companies with critical operations that are managed from bases, hubs, or offices."²⁴

Equipment vendors are developing new technologies that would allow CMRS providers other ways to offer dispatch features. For example, Qualcomm is developing its Q-Chat product to provide dispatch capability over cellular and PCS systems. In addition, industry analysts are discussing wireless data as a viable alternative to voice communications. As noted by Strategis, wireless data providers are offering fleet management, automated scheduling and dispatch capabilities to vehicle fleets.²⁵ Thus, even if Southern Linc were correct and the subject acquisition resulted in an artificial increase in dispatch prices, then additional wireless capacity and technology investment could be redirected to provide dispatch services and counter the artificial increase in dispatch prices. Given the actual and potential competition that Nextel faces from

²³ http://www.attws.com/business/smcgrp/explore/plans_phones/grp_calling/index.shtml,

²⁴ http://www.attws.com/business/smcgrp/explore/plans_phones/grp_calling/extend_wkgrp_comm.shtml.

²⁵ Strategis Report, p. 8

cellular and PCS providers, any artificial price increase would be unprofitable and unsustainable, and highly unlikely to be undertaken to begin with.

D. Competition for Nextel's Integrated Service Offering

Southern Linc fundamentally mischaracterizes Nextel's business model by portraying its products as competing primarily in the dispatch market. The majority of calls on the Nextel network are interconnect, not dispatch.²⁶ In a TD Marketing Research, Inc. survey of new Nextel customers (commissioned by Nextel), only 19% were previous two-way radio customers, whereas 82% were previous cellular customers.²⁷ According to the TD Marketing Research study, when new Nextel customers were asked what wireless service providers they had considered, the top four mentions were cellular providers: Sprint PCS, AT&T, Verizon, and CellularOne.²⁸ Similarly, in a survey of customers who left Nextel, Pacific Marketing Research found that only 2% replaced their Nextel service with two-way radio, whereas 68% replaced their service with cellular/PCS.²⁹

The fact that Nextel gains its customers from (and loses them to) cellular/PCS as opposed to dispatch providers is strong evidence that Nextel primarily competes in the broader CMRS market. Among the 68% of customers who replace their service with cellular/PCS almost half say that their new plan has either a special price for mobile-to-mobile or that mobile-to-mobile is free. Contrary to Southern Linc's assertion, consumers are clearly aware of the dispatch-feature offerings provided by the cellular and PCS manufacturers.

Southern Linc cites evidence from investment analysts who state that Nextel customers generally do not have alternatives.³⁰ This is not true in general, and it is certainly not true for the marginal customers that Nextel is gaining from (and losing to) cellular and PCS providers. But, even if Nextel's customers did not have alternatives, that would not be evidence that pure dispatch service is a separate market. In fact, Nextel's service is not pure dispatch and only a fraction of its customers use dispatch only. So conclusions about a pure dispatch market based on evidence from analysts studying a bundled market are flawed at best.

²⁶ Strategis estimates that 53% of Nextel's airtime minutes are interconnect. According to Nextel, that percentage continues to increase over time.

²⁷ TD Marketing Research, Inc. "Nextel New Customer Welcome Survey" Third Quarter 2000, p. 49. Strategis also reports that the vast majority of Nextel's new customers in the first half of 2000 were former cellular telephone users. Strategis Report, p. 49.

²⁸ TD Marketing Research, Inc. "Nextel New Customer Welcome Survey" Third Quarter 2000, p. 44.

²⁹ These exit interviews were conducted in November 2000. (p. 16 of internal Nextel presentation, dated December 15, 2000).

³⁰ Bauman and Siwek Affidavit, pp. 15-17.

Southern Linc discounts the dispatch features provided by cellular and PCS providers because they are limited to 30 users on a one-to-many call.³¹ Not only is 30 a large number—with 30 or more users, it would be very possible to set up a private system—but the vast majority of Nextel calls are one-to-one. Strategis reports that only 2% of Nextel's calls are one-to-many.³² Presumably only a minute number of those calls involve more than 30 users at a time. As a result, cellular and PCS providers offer today dispatch and interconnect features that could meet the needs of at least 98% of Nextel's calls and probably closer to 100%.

Nextel's integrated package of data, interconnected voice and Direct Connect services faces competition from a variety of different services: conventional cellular and PCS, new PCS and cellular service offerings targeted at the same customers, and more traditional dispatch offerings. All of these services provide competitive discipline in the CMRS market so that there is no likelihood of anticompetitive price increases.

E. Impact of the Proposed Acquisition on the CMRS Market

An analysis of Nextel's share of the CMRS market and market concentration in the major markets analyzed by Southern Linc shows little potential for anticompetitive behavior on Nextel's part. Table 2 shows spectrum holdings, HHIs and changes in HHIs for the CMRS markets in the nine regions analyzed by Southern Linc. Nextel is an important competitor in these markets, but only the fifth or sixth largest in terms of spectrum capacity, with a market share ranging from 9% to 11%.

With 209 MHz of total spectrum available to offer CMRS services in each market, Nextel's proposed acquisition of from 0.25 MHz to 1 MHz from Motorola will have a very small effect on Nextel's share and market concentration. None of the HHIs in these markets following the transfer of licenses from Motorola to Nextel exceed 1,800, and the delta HHIs (i.e. the difference between the pre-transfer HHIs and the post-transfer HHIs) are negligible.

V. Competitive Effects in the Dispatch Market

As discussed above, a preponderance of evidence demonstrates that the relevant market for analyzing the proposed acquisition is the CMRS market. Southern Linc, however, argues that the relevant market for analyzing the proposed acquisition is trunked dispatch. To address the allegations raised by Southern Linc, in this section I examine competitive effects in Southern Linc's purported relevant market of dispatch service. My analysis demonstrates that there are numerous current alternatives for dispatch-only customers. Accordingly, even using Southern Linc's proffered overly narrow market definition, the Commission should approve the transaction.

³¹ Comments of Southern Linc, submitted Nov. 20, 2000 in DA 00-2352, In re Motorola, Inc.; Motorola SMR, Inc., and Motorola Communications and Electronics, Inc. Applications for Consent to Assign 900 MHz SMR Licenses to FCI 900, Inc. ("Southern Motorola Comments") at pp. 5-6.

³² Strategis Report, p. 50.

A. Competition from CMRS Providers

As discussed above in section IV.A, CMRS providers can and do offer dispatch features as part of integrated services. Nextel and its CMRS competitors are developing new integrated interconnect, data and dispatch services, rather than investing in the provision of pure stand-alone dispatch service. Southern Linc asserts that firms offering integrated services do not provide competitive pressure for the stand-alone dispatch market. Simply because a company provides additional features does not mean that its products do not compete with more spartan offerings. There are lots of examples where producers develop new products with additional features that compete with standalone products. For example, multi-function printer/fax/copier/scanners provide competition for standalone printers, copiers and scanners. Intel's 386 chips provided significant competition for the older 286 chips. Ignoring the competition from advanced technology and features might lead one to conclude that automobile manufacturers provided no competition for buggy manufacturers.

Nextel is trying to attract, and is attracting, customers who generally have a number of other competitive options. As discussed above, the vast majority of Nextel's new customers in the first half of 2000 previously used cellular telephones.³³ As a result, Nextel has to compete with cellular and PCS providers to acquire customers through features, coverage and price. Another 10% of Nextel's new users were new to wireless and presumably chose between all available options. Only 5% of Nextel's new customers used mobile radio (i.e. dispatch). As discussed below, these customers have choices as well. But even if they did not, since they account for such a small fraction of the new customers, Nextel's pricing plans must be targeted to get the bulk of customers. In other words, these customers are "protected" by the purchasing habits of other customers.³⁴

Cellular providers, PCS providers and Nextel all put pressure on analog dispatch providers. Indeed, Strategis reports that 27% of analog dispatch churn results from competition from cellular/PCS/Nextel.³⁵

Moreover, nothing prevents consumers from subscribing only to Nextel's Direct Connect® service. At year end 2000, Nextel had 783,000 mobile units subscribe only to its dispatch service. Direct Connect® is a significant improvement over traditional analog dispatch, because it expands the typical dispatch service area, uses the spectrum more efficiently, provides higher voice quality and provides extra security.

³³ Strategis Report, p. 49.

³⁴ It is well recognized in antitrust analysis that if a producer were unable to discriminate between different types of customers and desires to attract those with alternatives because that group is significantly larger than the group without alternatives, then the small group would be protected from artificially high prices.

³⁵ Strategis Report, p. 28.

B. Stand-Alone Dispatch Alternatives

Pure dispatch may be a useful service, but Nextel's iDEN service and other integrated services are leading to a diminution in the number of customers demanding dispatch-only services.³⁶ Nevertheless, there are numerous alternatives for stand-alone dispatch. First, private radio competes with commercial dispatch services, because users have several choices: maintaining a private radio network, contracting for a private network, contracting for service on a private network or subscribing to a commercial service. Virtually all of Motorola's customers would qualify for licenses in the Business Pool or as Business users so that they could use the same spectrum that Southern Linc has incorporated into its SMR service (and ignored in their counting of spectrum available to serve dispatch customers). Second, there are more than 16 million private radio users in the 150 MHz and 450 MHz private radio bands³⁷ and equipment is easily available for use on those bands. The "refarming" that will take place in these bands over the next few years will increase capacity at the same time the projected number of users is declining. This means that there should be additional capacity available to provide dispatch or other services on the 150 MHz and 450 MHz bands. Third, the 220 MHz band provides some dispatch service, is expected to provide more in the future, and to the extent that there is more demand for dispatch service, the equipment manufacturers and license holders in this band will have greater incentives to provide service more rapidly.

Fourth, the Commission recently auctioned the 700 MHz "Guard Band" spectrum that will provide more opportunities for the provision of dispatch service. Since the Commission's rules for the 700 MHz Guard Band preclude the use of a cellular-like architecture, the guard band spectrum may be used for exactly the type of dispatch service that Southern Linc envisions. Last year, the Commission auctioned licenses for two MHz and four MHz blocks throughout the country. Nextel won a large number of the four MHz licenses, including all of the four MHz licenses in the nine major urban areas analyzed by Southern Linc. However, the Commission requires that at least half of the spectrum be leased to non-affiliated entities. This means that even though Nextel acquired the license to four MHz in many areas, at least two MHz of that spectrum will be used by non-affiliated entities. Nextel won none of the two MHz licenses so those are also available for use.³⁸ That means that a total of at least four MHz will be available to non-Nextel parties in every area.³⁹ Four MHz is much more than the spectrum at stake in this transaction (a maximum of 1 MHz in any one geographic area).

³⁶ Strategis estimates that the number of private dispatch users will decrease by 1 million over the next four years. Strategis Report, p. 65.

³⁷ FCC Fifth Report, p. 69.

³⁸ Access Spectrum, Dominion 700, and Pegasus Guard Band won the two MHz licenses in these regions.

³⁹ It should be noted that in many areas, there are incumbent television broadcasters so this spectrum may not be usable right away.

C. Southern Linc's Analysis Overstates Concentration in the Dispatch Market

Southern Linc bases its competitive analysis of the proposed acquisition on market concentration as measured by channel pairs in the 800 MHz SMR, 900 MHz SMR and 220 MHz bands. This might be an acceptable method for analyzing competitive effects in a regulatory regime where 800 MHz SMR, 900 MHz SMR and 220 MHz spectrum were mandated to be used for dispatch, and where no other spectrum could be used for dispatch services. However, in the current environment where spectrum is fungible and can be redirected to its highest valued use, Southern Linc's methodology does not provide a meaningful or reliable indication of the competitive effects of the acquisition.

Even if we accept Southern Linc's definition of a dispatch-only market, Southern Linc's analysis provides an erroneous description of "concentration." First, Southern Linc significantly over counts Nextel's position in the provision of dispatch service. As discussed above, it is incorrect to exclude from this analysis spectrum capacity held by cellular and PCS providers. If, however, Southern Linc chooses to do that, it should also exclude the spectrum capacity held by Nextel that is used for purposes other than dispatch services (and used for the same purposes as the excluded cellular and PCS spectrum). Since only 47% of Nextel's minutes are dispatch and the compression ratio is 6:1 for dispatch and 3:1 for interconnect, then only $0.47/(0.47+2(0.53))=31\%$ of Nextel's capacity is used for dispatch and should be included in Southern Linc's concentration analysis.

Southern Linc also excludes the PCS spectrum at 1.9 GHz because it claims those frequencies are not substitutable for the spectrum at 800 and 900 MHz.⁴⁰ While it is true that higher frequencies propagate over a somewhat shorter distance than 800 MHz frequencies, they are still substitutable. For example, few would dispute that PCS providers compete with cellular providers who use the 800 MHz band. The propagation characteristics may preclude a PCS operator from using its spectrum for a wide-area single tower system, but that is not the service being provided by Nextel or Southern Linc. Both operate multiple site systems similar to those of 1.9 GHz PCS providers. Yet, Southern Linc includes in its calculations the entire spectrum Nextel uses to operate its iDEN system while excluding all PCS and cellular spectrum. Southern Linc's analysis also excludes several other alternatives for dispatch-only service: the 450 MHz spectrum used for private radio, and the recently auctioned 700 MHz guard band spectrum.

Finally, Southern Linc does not account for Nextel's 800 MHz spectrum holdings correctly. There are a total of 530 channels available in each market: 200 upper band channels, 150 lower band channels, 80 interleaved SMR channels, and 100 Business and Industrial/Land Transportation pool channels.⁴¹ In counting Nextel's usable 800 MHz channels in each market, Southern Linc includes all Nextel's channel holdings, including

⁴⁰ Southern Motorola Comments at pp. 6-7.

⁴¹ Fewer channels are available in the U.S. – Canada and U.S. – Mexico border areas due to allocation of the channels among the two countries. See 47 CFR § 90.619(b).

its holdings of business and industrial/land transportation channels.⁴² However, Southern Linc's calculation assumes only 430 total channels available in each market rather than the correct total of 530. In addition, Southern Linc uses the results of the 800 MHz overlay auctions rather than the actual channel counts, overstating the number of channels that Nextel controls. This occurs because there are many areas where Nextel has the overlay license, but others have site-specific licenses that the overlay licensee is forced to protect or relocate to equivalent spectrum.⁴³ In either case, the incumbents need to be counted as they provide service and will have the opportunity to provide service in the long run.

When I redo Southern Linc's analysis to: 1) include only the spectrum that Nextel uses for dispatch calls; 2) include 450 MHz and 700 MHz spectrum; and 3) properly account for 800 MHz spectrum, the results suggest that even within the artificially narrow market definition proposed by Southern Linc, the pre-transfer and post-transfer HHIs are not large enough to conclude that Nextel possesses market power or that the transaction would cause serious concern. Table 3 shows that for the nine major urban areas analyzed by Southern Linc all of the HHIs are less than 800 and the delta HHIs do not exceed 60.

Even these calculations overstate concentration in the dispatch market. First, these calculations do not include any of the bandwidth used by cellular or PCS providers for the provision of dispatch-like services. Adding the spectrum used for "mobile-to-mobile" service would reduce the delta HHIs arising from the transaction. Second, these calculations exclude certain spectrum that can be used for offering dispatch services: 20 MHz of spectrum from 150 – 170 MHz and 12 MHz spectrum from 470 – 512 MHz that was reallocated from television channels 14-20 in major cities. Including this spectrum, which can be used for private radio, would reduce market concentration and the delta HHIs arising from the transaction.

Finally, as noted in the DOJ/FTC Merger Guidelines, concentration statistics are only a first step in analyzing the competitive effects of a merger or acquisition. As discussed above, even in the unlikely event that Nextel attempted to charge supra-competitive prices for dispatch services, there are numerous opportunities for competitive entry into the provision of dispatch services, and such entry would thwart any attempted price increase. Because of the many providers and potential providers of dispatch service, there are no competitive concerns with Nextel's proposed acquisition of Motorola's 900 MHz licenses.

While this section has analyzed the competitive effects in a hypothetical dispatch market and shown there are no competitive concerns for dispatch customers, the analysis does not affect my earlier conclusion that the appropriate relevant market includes all CMRS spectrum. All CMRS spectrum can be used to provide dispatch (and interconnect, data,

⁴² Baumann and Siwek Affidavit, Table EI 2.1

⁴³ In the upper 200 channels, the overlay license winner has the right to relocate the incumbent licensees or to let them remain and protect them from interference. In the lower 80 and 150 general category channels, the auction winner must protect the incumbents and does not have relocation rights.

etc.) just like the spectrum Nextel, Southern and Motorola use, and therefore, all of the spectrum should be included in the same relevant CMRS market to analyze this transaction.

VI. Roaming Analysis

Southern Linc has stated that instituting a roaming requirement on Nextel alone would mitigate the concerns Southern Linc claims arise from the merger. There are two significant problems with this condition. First, a roaming requirement is not related to the transaction at hand nor to the alleged harms raised by Southern. Second, instituting a roaming requirement on Nextel alone could cause competitive disincentives that would harm consumers. An additional problem is that it would saddle the fifth or sixth largest competitor in the CMRS marketplace with a requirement that no other provider faces.⁴⁴

Southern Linc claims that the Motorola transaction would increase concentration in the dispatch market by removing a competitive dispatch provider. As I understand it, Southern Linc's request for roaming would only enable its subscribers to roam onto Nextel's network for *interconnected* calls. None of Nextel's roaming partners have the ability to roam with dispatch calling features. Nor can Nextel's customers use their dispatch service seamlessly on their partners' systems. In fact, a Nextel customer cannot even roam within the Nextel system for dispatch services. For example, a Nextel customer living in Chattanooga, Tennessee can use his dispatch service in all of Nextel's coverage areas within Tennessee, and he can even use it into portions of Northern Georgia. However, as he travels south in Georgia toward Atlanta, he can no longer use his dispatch service and custom calling groups because he has moved into a different Nextel dispatch system, and the iDEN network on which Nextel provides its services is unable to support this kind of roaming.

If Southern Linc wants to provide a nationwide interconnected service, then there are many possible avenues. It could put together a nationwide system like AT&T Wireless, Sprint PCS, Verizon, Cingular, Nextel, and VoiceStream. It has the option of striking roaming deals with any or all of these or other providers like others have. Although I am not a technical expert on roaming, Southern Linc's claim that Nextel is the only viable roaming partner rings hollow. First, Southern Linc points to Nextel's international roaming arrangements in its petitions,⁴⁵ but ignores the fact that Nextel's customers must purchase the i2000 phone, a dual-band, dual-mode phone, to use these foreign systems. This phone works on iDEN systems in the U.S. and on 900 MHz GSM systems abroad. In addition many big PCS and cellular companies routinely sell (and subsidize) dual and tri mode and dual band phones for their customers, enabling operations across 800 MHz and 1.9 GHz frequencies. This is so that their customers can have the roaming advantages they demand in the competitive CMRS marketplace.

⁴⁴ In this analysis I do not address network differences or other technical issues associated with roaming.

⁴⁵ Comments of Southern Linc, filed Jan. 5, 2001 in "In re Automatic and Manual Roaming Obligations Pertaining to Comm. Mobile Services", WT Docket No. 00-193, at pp. 12-13.

Even if the Commission were to institute a roaming rule, it would soon be asked to weigh in on the price for roaming if Southern Linc really had no alternative. Absent price regulation, Nextel would be free to charge whatever price it wanted (if Southern Linc really had no competitive alternative). Presumably Southern Linc would be unhappy with this result and would complain to the Commission (if lawyers fees were less than the expected gain from protesting).

Usually, contracts between companies are the result of negotiation and mutually benefit both parties. In this case, Nextel would gain access to a small area Southern Linc covers, and Southern Linc would gain access to the entire country. As a result, Nextel would want to levy significant roaming charges on Southern Linc's customers and be willing to pay very little for the additional coverage offered by Southern. In addition, each roaming arrangement has fixed costs so that unless the benefits were high, or the costs low, Nextel might not even find it profitable to enter into negotiations. For example, it is my understanding that Nextel's systems are seamlessly compatible with Nextel partners systems. If roaming with Southern Linc requires additional or different configurations, this could cause additional costs that would eliminate the benefits from a roaming agreement with Southern Linc.

Instituting a roaming requirement on Nextel would dampen Southern Linc's (and other providers') incentives to build out their own systems. Southern Linc would have less incentive to aggressively expand its service territory because it could simply rely on Nextel's coverage. In fact, Southern Linc might even have less incentive to fully cover its existing service territory. For example, there might be areas that would not generate enough calls to justify construction of a cell site to remove a dead spot in the system, but would cause enough dissatisfaction among customers to cause them to drop service. Without a roaming requirement, Southern Linc might find it worthwhile to construct. But with a roaming rule, it could rely on Nextel to undertake the money losing expense of providing service to cover the dead spot.⁴⁶

While it is not surprising that Southern Linc would like the FCC to mandate low-cost access to a competitor's network, it is generally understood that such mandates should only occur in situations involving access to "essential facilities." This is because mandated access distorts investment incentives. The usual conditions necessary to consider mandating access are that a monopolist controls a bottleneck facility, that it is difficult or impossible to duplicate the facility, and that there are no alternatives to the facility. While it might cost Southern Linc more money to avoid the use of Nextel's network or to pay for its use in a commercial transaction, mere expense is not sufficient to prove an essential facilities case.

In this case, none of the three conditions hold. Nextel is not a monopolist. It is not difficult or impossible to duplicate the facility. There are alternatives to Nextel's facilities. Nextel has spent more than \$12 billion (\$5.5 billion in spectrum acquisitions

⁴⁶ While this may be statically efficient, it would shift the cost burden to Nextel from Southern Linc, possibly above the roaming fees paid, and would reduce the dynamic competition between networks.

and \$7 billion in network buildout) to develop its nationwide network. In a competitive market, it should be allowed to control access to that network. Southern may have to spend money to compete effectively in the CMRS market, but Nextel and all of the other major CMRS providers have spent significant amounts of money to build their networks. Just like the antitrust laws do not require Safeway to let corner grocery stores use its trucks and warehouses, the Commission should not mandate the use of competitive facilities.

A roaming requirement could also affect Nextel's ability to upgrade its service. Coordinating multiple firms to upgrade service is much more difficult than having a single firm make the upgrade decision itself. This is clearly evident in the Commission's refarming docket where coordinated action required the Commission to mandate a transition path.

The proposed roaming requirement does not address any of Southern Linc's alleged problems with the proposed transaction. Rather, it is an attempt to use the current transaction to gain a commercial advantage through the regulatory process. The competitive alternatives available show that such a rule is not necessary. Finally, instituting a roaming rule would create incentives for Southern Linc not to compete as vigorously as it might otherwise. For all of these reasons, the Commission should decline to adopt a roaming rule as a condition for approval of Nextel's acquisition of Motorola's 900 MHz licenses.

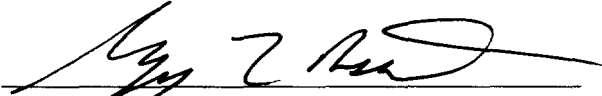
VII. Conclusion

Analysis of the proposed transaction shows that moving the spectrum from use in an analog, high-power dispatch system configuration to Nextel's iDEN service will promote competition in the CMRS market and generate substantial consumer benefits. At the same time there are no real competitive concerns with the transaction. CMRS customers in general will benefit from the enhanced efficiency and ability for a provider to operate efficiently, provide new services and expand output. Dispatch customers will also benefit from the higher quality services, and those who want plain vanilla dispatch services should still have multiple options.

Nextel is only one of many providers in the CMRS marketplace. Southern Linc's argument would allow AT&T Wireless, Verizon, Sprint, or Cingular to acquire the Motorola spectrum and use it to provide exactly the same services as Nextel even though each of them has much more spectrum than Nextel. Restrictions on the fifth or sixth largest player in a market that do not apply to any of the top four or five firms are unheard of in competition policy.

The Commission should adhere to its own statements about the importance of marketplace driven approaches to spectrum policy and allow Nextel to acquire the Motorola spectrum without any roaming or other conditions imposed. In that way, the spectrum will be utilized in the way that maximizes the value of wireless service to the public.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief. Executed on March 7, 2001



Gregory L. Rosston

Table 1

Largest CMRS Spectrum Licensees (By Capacity) in Major Urban Areas¹

All Figures in MHz

New York		Los Angeles		Chicago		San Francisco		Detroit	
1. AT&T	45.00	1. AT&T	45.00	1. Verizon	65.00	1. AT&T	35.00	1. VoiceStream	40.00
2. Verizon	45.00	2. Verizon	45.00	2. AT&T	30.00	2. Verizon	35.00	2. Cingular	35.00
3. VoiceStream	30.00	3. Cingular	30.00	3. VoiceStream	30.00	3. MetroPCS	30.00	3. AT&T	30.00
4. Sprint	30.00	4. Sprint	30.00	4. Cingular	25.00	4. Sprint	30.00	4. Sprint	30.00
5. Nextel²	19.90	5. Nextel	21.85	5. Nextel	20.70	5. Cingular	20.00	5. Verizon	25.00
6. Cingular	10.00	6. VoiceStream	20.00	6. Sprint	20.00	6. VoiceStream	20.00	6. Nextel	18.75
7. Northcoast	10.00					7. Nextel	19.83	7. Nextwave	10.00

Dallas		Philadelphia		Washington		Atlanta	
1. AT&T	45.00	1. Verizon	45.00	1. Verizon	45.00	1. Cingular	35.00
2. Cingular	35.00	2. Cingular	35.00	2. AT&T ³	40.00	2. AT&T	30.00
3. Sprint	30.00	3. AT&T	30.00	3. Cingular	35.00	3. Metro PCS	30.00
4. Verizon	30.00	4. Sprint	30.00	4. Sprint	30.00	4. VoiceStream	30.00
5. VoiceStream	30.00	5. VoiceStream	30.00	5. Nextel	20.20	5. Verizon	25.00
6. Nextel	23.90	6. Nextel	22.20	6. VoiceStream	20.00	6. Nextel	18.75
						7. Alltel	10.00
						8. Sprint	10.00

¹ Geographic regions are those used in Southern Linc's analysis.² Nextel spectrum is not contiguous; cellular and PCS licenses were assigned in blocks of at least 5 MHz (and up to 30 MHz).³ Includes 10 MHz of PCS spectrum held by Dobson Communications Corp. (DCC).

Note: Includes cellular, PCS, 800 MHz (less public safety), 900 MHz SMR, 220 MHz, and 700 MHz Guard Band spectrum

Source: Updated Attachment 1 to Exhibit B of the Assignment Applications, submitted in an ex parte letter to Lauren Kravets, Feb. 22, 2001; FCC Results of Guard Band Auction; Nextel.

Table 2

CMRS Market Concentration in Major Urban Areas

Includes Cellular, PCS, 800 MHz (less public safety), 900 MHz SMR, 220 MHz, and 700 MHz Guard Band spectrum.

Region ¹	AT&T ²	Cingular	Metro PCS	Sprint	Verizon	Voice Stream	Other PCS ³	Motorola ⁴	Southern Linc ⁵	Nextel ⁶	220 MHz ⁷	Other 700 MHz ⁸	Other 800 MHz ⁹	Other 900 MHz ¹⁰	Total CMRS Spectrum	Total Pre-Transfer HHI	Total Post-Transfer HHI	Δ HHI
New York																		
Total Spectrum (MHz)	45.00	10.00	0.00	30.00	45.00	30.00	10.00	1.00	0.00	19.90	1.55	4.00	10.35	2.25	209.1			
As % of Total Spectrum	22%	5%	0%	14%	22%	14%	5%	0%	0%	10%	1%	2%	5%	1%		1,482	1,491	9
Los Angeles																		
Total Spectrum (MHz)	45.00	30.00	0.00	30.00	45.00	20.00	0.00	0.50	0.00	21.85	1.55	4.00	9.15	2.00	209.1			
As % of Total Spectrum	22%	14%	0%	14%	22%	10%	0%	0%	0%	10%	1%	2%	4%	1%		1,545	1,550	5
Chicago																		
Total Spectrum (MHz)	30.00	25.00	0.00	20.00	65.00	30.00	0.00	0.25	0.00	20.70	1.55	4.00	9.80	2.75	209.1			
As % of Total Spectrum	14%	12%	0%	10%	31%	14%	0%	0%	0%	10%	1%	2%	5%	1%		1,718	1,720	2
San Francisco																		
Total Spectrum (MHz)	35.00	20.00	30.00	30.00	35.00	20.00	0.00	0.75	0.00	19.83	1.55	4.00	10.80	2.13	209.1			
As % of Total Spectrum	17%	10%	14%	14%	17%	10%	0%	0%	0%	9%	1%	2%	5%	1%		1,253	1,260	7
Detroit																		
Total Spectrum (MHz)	30.00	35.00	0.00	30.00	25.00	40.00	10.00	0.25	0.00	18.75	1.55	4.00	1.00	1.50	197.1			
As % of Total Spectrum	15%	18%	0%	15%	13%	20%	5%	0%	0%	10%	1%	2%	1%	1%		1,471	1,473	2
Dallas																		
Total Spectrum (MHz)	45.00	35.00	0.00	30.00	30.00	30.00	0.00	0.50	0.00	23.90	1.55	4.00	6.60	2.50	209.1			
As % of Total Spectrum	22%	17%	0%	14%	14%	14%	0%	0%	0%	11%	1%	2%	3%	1%		1,496	1,502	5
Philadelphia																		
Total Spectrum (MHz)	30.00	35.00	0.00	30.00	45.00	30.00	0.00	0.75	0.00	22.20	1.55	4.00	7.80	2.75	209.1			
As % of Total Spectrum	14%	17%	0%	14%	22%	14%	0%	0%	0%	11%	1%	2%	4%	1%		1,480	1,487	8
Washington																		
Total Spectrum (MHz)	40.00	35.00	0.00	30.00	45.00	20.00	0.00	0.50	0.00	20.20	1.55	4.00	10.30	2.50	209.1			
As % of Total Spectrum	19%	17%	0%	14%	22%	10%	0%	0%	0%	10%	1%	2%	5%	1%		1,508	1,512	5
Atlanta																		
Total Spectrum (MHz)	30.00	35.00	30.00	10.00	25.00	30.00	10.00	0.25	12.00	18.75	1.55	4.00	0.00	2.50	209.1			
As % of Total Spectrum	14%	17%	14%	5%	12%	14%	5%	0%	6%	9%	1%	2%	0%	1%		1,203	1,205	2

¹ Geographic regions are those used in Southern Linc's analysis.

² Includes 10 MHz of PCS spectrum in Washington, DC held by Dobson Communications Corp. (DCC).

³ Other PCS spectrum is held by a single licensee in New York (Northcoast), Detroit (Nextwave), and Atlanta (Alltel).

⁴ Source: Updated Attachment 1 to Exhibit B of the Assignment Applications, submitted in an ex parte letter to Lauren Kravets, Feb. 22, 2001.

⁵ Assumes Southern Linc holds licenses in Atlanta for all 800 MHz channels not held by Nextel.

⁶ Includes Nextel's 700 MHz Guard Band, 800 MHz and 900 MHz spectrum. Nextel spectrum is not contiguous; cellular and PCS licenses were assigned in blocks of at least 5 MHz (and up to 30 MHz).

Source for 800 and 900 MHz spectrum: Updated Attachment 1 to Exhibit B of the Assignment Applications, submitted in an ex parte letter to Lauren Kravets, Feb. 22, 2001. Source for 700 MHz Guard Band spectrum: FCC Results of Guard Band Auction.

⁷ Source: Baumann and Siwek Affidavit, Tables EI_7.1-EI_7.9.

⁸ Source: FCC Results of Guard Band Auction. Includes 1 MHz "A" band license, 1 MHz "A" band unaffiliated user, and 2 MHz "B" band unaffiliated user. Assumes unaffiliated users do not hold other spectrum in the same urban area.

⁹ Assumes spectrum not held by Nextel or Southern Linc is evenly divided among 5 firms who do not hold any other spectrum in the same urban area.

¹⁰ Assumes 900 MHz commercial spectrum (200 channels) not held by Nextel or Motorola is held by firms with 60 channels of spectrum (e.g. if 140 channels available after accounting for Nextel and Motorola, assume two firms each with 60 channels, one firm with the remainder, 20 channels.)

Source for Cellular and PCS spectrum holdings: Nextel.

Table 3

Dispatch Concentration in Major Urban Areas Excluding PCS and Cellular Spectrum

Total Spectrum includes 220 MHz, 450 MHz, 700 MHz, 800 MHz (less public safety), and 900 MHz (less public safety) but excludes PCS and Cellular band dispatch communicat

Region ¹	Motorola	Southern Linc ²	Nextel ³	220 MHz	450 MHz ⁴	Other 700 MHz	Other 800 MHz	Other 900 MHz	Total Spectrum Used for Dispatch	Total Pre-Transfer HHI	Total Post-Transfer HHI	Δ HHI
New York												
Total Spectrum (MHz)	1.00	0.00	7.50	1.55	20.00	4.00	10.35	7.25	51.6			
As % of Total Spectrum	2%	0%	15%	3%	39%	8%	20%	14%		498	554	56
Los Angeles												
Total Spectrum (MHz)	0.50	0.00	8.10	1.55	20.00	400%	9.15	7.00	50.3			
As % of Total Spectrum	1%	0%	16%	3%	40%	0.08	18%	14%		540	572	32
Chicago												
Total Spectrum (MHz)	0.25	0.00	7.74	1.55	20.00	4.00	9.80	7.75	51.1			
As % of Total Spectrum	0%	0%	15%	3%	39%	8%	19%	15%		515	530	15
San Francisco												
Total Spectrum (MHz)	0.75	0.00	7.48	1.55	20.00	400%	10.80	7.13	51.7			
As % of Total Spectrum	1%	0%	14%	3%	39%	0.08	21%	14%		501	543	42
Detroit												
Total Spectrum (MHz)	0.25	0.00	7.15	1.55	20.00	4.00	1.00	5.75	39.7			
As % of Total Spectrum	1%	0%	18%	4%	50%	10%	3%	14%		657	680	23
Dallas												
Total Spectrum (MHz)	0.50	0.00	8.73	1.55	20.00	400%	6.60	7.50	48.9			
As % of Total Spectrum	1%	0%	18%	3%	41%	0.08	14%	15%		585	622	37
Philadelphia												
Total Spectrum (MHz)	0.75	0.00	8.21	1.55	20.00	4.00	7.80	7.75	50.1			
As % of Total Spectrum	1%	0%	16%	3%	40%	8%	16%	15%		540	589	49
Washington												
Total Spectrum (MHz)	0.50	0.00	7.59	1.55	20.00	400%	10.30	7.50	51.4			
As % of Total Spectrum	1%	0%	15%	3%	39%	0.08	20%	15%		505	534	29
Atlanta												
Total Spectrum (MHz)	0.25	5.64	7.15	1.55	20.00	4.00	0.00	7.50	46.1			
As % of Total Spectrum	1%	12%	16%	3%	43%	9%	22%	16%		742	759	17

¹ Geographic regions are those used in Southern Linc's analysis.

² Excludes the 53% of Southern Linc's 800 MHz spectrum used for interconnect, based on the assumption that Southern Linc has same proportion of interconnect and dispatch calls as Nextel.

³ Includes Nextel's 700 MHz Guard Band, 800 MHz, and 900 MHz spectrum. Excludes the 69% of Nextel's 800 MHz and 900 MHz spectrum used for interconnect.

⁴ Assumes that spectrum is divided evenly among ten firms who do not hold any other spectrum in the same urban area.

See footnotes to Table 2 for description of my analysis of 220 MHz, 700 MHz Guard Band, 800 MHz, and 900 MHz bands.

Source: Sources as in Table 2.

Exhibit A

Gregory L. Rosston

1819 Edgewood Lane
Menlo Park, CA 94025
Phone (650) 566-8622
Fax (707) 922-0185

Economics Department
Stanford University
Stanford, CA 94305-6072
Phone (650) 566-9211
Fax (707) 922-0185

Employment

Stanford University, Stanford, CA
Deputy Director, Stanford Institute for Economic Policy Research, 1999-
Research Fellow, Stanford Institute for Economic Policy Research, 1997-
Lecturer in Economics and Public Policy, 1997-

Federal Communications Commission, Washington, DC
Deputy Chief Economist, 1995-1997
Acting Chief Economist, Common Carrier Bureau, 1996
Senior Economist, Office of Plans and Policy, 1994-1995

Law and Economics Consulting Group, Berkeley, CA
Senior Economist, 1990-1994

Economists Incorporated, Washington, DC
Economist/Research Associate, 1986-1988

Education

Stanford University, M.A., Ph.D., in Economics, Specialized in the fields of Industrial Organization and Public Finance. 1986, 1994.

University of California, Berkeley, A.B. in Economics with Honors. 1984.

Papers and Publications

"An Economic Analysis of the Effects of FCC Regulation on Land Mobile Radio," unpublished Ph.D. dissertation, Stanford University. 1994.

"Competition in Local Telecommunications: Implications of Unbundling for Antitrust Policy" in Brock, G., (ed.) Toward a Competitive Telecommunication Industry: Selected Papers from the 1994 Telecommunications Policy Research Conference, LEA Associates, Mahwah, NJ. 1995 (with Harris, R. and Teece, D.).

"Competition and 'Local' Communications: Innovation, Entry and Integration," *Journal of Industrial and Corporate Change*. 1995 (with Teece, D.).

"Spectrum Flexibility will Promote Competition and the Public Interest," *IEEE Communications Magazine*, December, 1995 pp 2-5. (with Hundt, R.).

"Interconnecting Interoperable Systems: The Regulators' Perspective." *Information, Infrastructure and Policy*. 1996 (with Katz, M., and Anspacher, J.).

"Everything You Need To Know About Spectrum Auctions, But Didn't Think To Ask," *Washington Telecom News*, Vol. 4, No. 5. February 5, 1996 p-5. (with Hundt, R.).

The Internet and Telecommunications Policy: Selected Papers from the 1995 Telecommunications Policy Research Conference, LEA Associates, Mahwah, NJ. 1996 (ed. with Brock, G.).

"Introduction," in Brock, G., and Rosston, G., (ed.s) (1996) The Internet and Telecommunications Policy: Selected Papers from the 1995 Telecommunications Policy Research Conference, LEA Associates, Mahwah, NJ. 1996 (with Brock, G.).

"Competition and 'Local' Communications: Innovation, Entry and Integration," in Noam, E., (ed.) The End of Territoriality in Communications: Globalism and Localism, Elsevier. 1997 (with Teece, D.).

"Using Market-Based Spectrum Policy to Promote the Public Interest," FCC Staff Paper, 1997. Also published in *Federal Communications Law Journal*, Vol. 50, No. 1. 1997 (with Steinberg, J.).

"A New Spectrum Policy: Letting the Market Work" *Radio Communication Reports*, March 3, 1997, pp 59-64.

"The Telecommunications Act Trilogy," *Media Law and Policy* . Vol V, No. 2 Winter 1997, pp 1-12. (<http://www.cmcnyls.edu/public/MLP/TrilgWeb.HTM>).

"Interconnection and Competition Policy," *Cable TV and New Media*. Vol XV, No. 3 May, 1997, pp 1-4.

"Pricing Principles to Advance Telephone Competition," *Cable TV and New Media*. Vol XV, No. 4 June, 1997, pp 1-3.

Interconnection and The Internet: Selected Papers from the 1996 Telecommunications Policy Research Conference, LEA Associates, Mahwah, NJ. 1997 (ed. with Waterman, D.).

"Introduction," in Waterman, D., and Rosston, G., (ed.s) (1997) Interconnection and The Internet: Selected Papers from the 1996 Telecommunications Policy Research Conference, LEA Associates, Mahwah, NJ. 1997 (with Waterman, D.).

"Comment on the Value of New Services in Telecommunications" *Brookings Papers on Microeconomic Activity--Microeconomics*, 1997.

"On the Record: Former FCC Economist Backs Universal Service Alternative" *Telecommunications Reports*, Vol. 63, No. 51. December 22, 1997, pp 51-53.

“Universal Service Reform: An Economist’s Perspective,” *Cable TV and New Media*. Vol XV No. 11, January, 1998, pp 1-4.

“Alternative Paths to Broadband Deployment,” *IEEE Communications Magazine*, July, 1998 pp 2-4. (with Hundt, R.).

“An Insiders' View of FCC Spectrum Auctions,” Stanford Institute for Economic Policy Research Working Paper No. 98-2, February, 1999. *Journal of Regulatory Economics*, Vol 17, No. 3, 253-289, 2000 (with Kwerel, E.).

“The High Cost of Universal Service,” *CCH Power and Telecom Law*, January-February 1999 (with Wimmer, B.).

“Effects of Unbundling Proposals on Cable Investment Incentives,” *The Party Line, Newsletter of the Communications Industry Committee, American Bar Association Section of Antitrust Law*, March 1999 (with Owen, B.).

“The ABC’s of Universal Service: Arbitrage, Big Bucks and Competition,” Stanford Institute for Economic Policy Research Working Paper No. 98-4, April, 1999. *Hastings Law Journal*, Vol. 50, No. 6, August 1999 (with Wimmer, B.).

“Winners and Losers from the Universal Service Subsidy Battle,” Stanford Institute for Economic Policy Research Working Paper No. 99-8, December, 1999. published in Vogelsang, I. and Compaine, B. (ed.s) The Internet Upheaval: Raising Questions, Seeking Answers in Communications Policy, MIT Press: Cambridge 2000 (with Wimmer, B.).

“The ‘State’ of Universal Service,” Stanford Institute for Economic Policy Research Working Paper No. 99-18, April 2000. *Information, Economics and Policy*, Vol. 12, No. 3. 261-283, September 2000 (with Wimmer, B.).

“From C to Shining C: Competition and Cross-Subsidy in Communications,” Stanford Institute for Economic Policy Research Working Paper No. 00-21, October 2000. *Forthcoming* in Compaine, B. and Greenstein, S. (ed.s) *Selected Papers from the 2000 Telecommunications Policy Research Conference*: MIT Press (with Wimmer, B.).

Other Professional Activities

Referee for *American Economic Review*, *Rand Journal of Economics*, *Industrial and Corporate Change*, *Journal of Industrial Economics*, *Telecommunication Systems*.

FCC Economist Panel Hearing on the Economics of Interconnection, May, 1996.
FCC Economist Panel Hearing on the Economics of RBOC Entry under Section 271, July, 1996.

FCC Economist Panel Hearing on Competitive Bidding for Universal Service Provision, March, 1997

Consultant for the World Bank, 1998.

FCC Academic Expert Panel on “A New FCC for the 21st Century,” June 1999.

FCC Academic Expert Panel on AT&T—MediaOne Merger, February, 2000.

Awards

Chairman's Distinguished Service Award, FCC, 1997.

University of California, Brad King Award for Young Alumni Service, 1994.

National Performance Review Hammer Award for Reinventing Government, 1994.

Telecommunications Policy Research Conference Graduate Student Paper Competition, 2nd Place, 1994.

John M. Olin Foundation Fellowship, 1989-1990.

Charles Mills Gayley Fellowship, 1985.

Stanford University Fellowship, 1984-1985.

ATTACHMENT 2



Holiday shopping has never been easier, thanks to this terrific offer from Southwestern Bell Wireless. With **FamilyTalk**, get up to four additional lines, share minutes and talk free between family for as little as **\$9.95 per month, per line**. Plus, when you sign up for new service, you'll get

- A Nokia 5165 digital phone for just \$29
- 500 minutes of FREE local weekend calling per month
- 500 minutes of FREE local Phone-to-Phone[®] calling per month — **free calls to and from family members and any other Southwestern Bell Wireless customer**
- Three months of FREE Smart Rescue[™] roadside assistance

There's no better way for busy families to stay in touch before, during and after the holidays.

NEW RATES

ALL PRICES INCLUDE FREE LOCAL PHONE & 24-HOUR CARRY-OUT.

[illegible]

NOKIA
Communications

ASK ABOUT OUR REGIONAL RATES, NO ROAMING, AND NO LONG-DISTANCE CHARGES IN ARIZONA, LOUISIANA, NEW MEXICO, OKLAHOMA AND TEXAS.

Southwestern Bell *The Stone*

[illegible]

PREMIUM AGENT LOCATIONS

[illegible]

AUTHORIZED RETAILERS

WAL-MART  RadioShack  HAWK  SEARS

AUTHORIZED AGENTS

[illegible]

Revised 28 Feb 1994 and modified May 1997 to 1A 2004

To order via phone, call
1-888-335-BELL (2355)
www.swbellwireless.com

Verizon Wireless

Mobile to Mobile minutes now included.

Digital Choice 250 Plan:

- 250 Anytime Local Minutes
- 500 Night and Weekend Minutes
- 250 Mobile to Mobile Minutes
between Verizon Wireless customers

That's 1000 minutes a month.

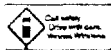
\$19.⁹⁹ a month for
three months
(\$29.⁹⁹ a month thereafter)

Audiovox 9000
digital phone

FREE

(After \$50 mail-in bill credit.
2-year agreement required.)

Join in.



Local Calling Plan Offer Available to Current Customers.

call 1.866.2 JOIN IN

shop online @ www.verizonwireless.com



verizonwireless

VERIZON WIRELESS COMMUNICATIONS STORES

SANTA CRUZ PLAZA
3738 S. 16th Ave.
(M-F 9-7, Sat 9-6, Sun 11-5)
(520) 320-4849

PARK PLACE MALL
5870 E. Broadway Blvd., Suite 206
(M-Sat 10-5, Sun 12-6)
(520) 320-4851

SPEEDWAY-CRAYCROFT PLAZA
5480 E. Speedway C101
(M-F 9-7, Sat 9-6, Sun 11-5)
(520) 320-4840

AUTHORIZED AGENTS

Joe Cristiani's Mobile Communications
Circuit City



RadioShack

Ask about getting a free phone every two years (up to \$100 value).

Call Plan Offer: Subject to terms of Cellular Service Agreement, Price Plans and Promotions. One or two-year agreement required (with credit approval). \$30 service establishment fee and early termination fees apply. Cannot be combined with other offers. Usage is rounded up to the next full minute. Unused allowance lost. All calls are subject to taxes and other charges. Digital service not available in all areas. CDMA phone required. Nights: Monday through Friday 7:00 p.m. - 7:00 a.m.; Weekends 7:00 p.m. - Friday through 7:00 a.m.; Monday. Mobile to mobile minute access requires all parties to be on the local Verizon Wireless network with geographic and other restrictions (see Calling Plan Coverage Map brochure for mobile to mobile geographic restrictions). Phone offer: Phone is \$49.99 with 1-year service agreement. Offer only available on select calling plans of \$29.99 or more. New lines of service only. Phone and service price may vary at authorized agent locations. All services subject to change without notice. Offer available in select Verizon Wireless markets and expires 11/30/00. ©2000 Verizon Wireless. All rights reserved.



MORE TIME FOR YOUR FAMILY.

CAN YOU HANDLE THAT?

NOW ADD A PERSON FOR \$20

Start with more total shared minutes to call anyone you want.

600 plus **2000** only **\$39⁹⁹**

Anytime Minutes Nationwide Weekend Minutes Per Month

Add a person and get an additional 500 VoiceStream-to-VoiceStream minutes for \$20 per month.

VoiceStream
Set more from life.

Western Mountain
Neighborhood



INCLUDES LONG DISTANCE
AND DIGITAL ROAMING
WITHIN AZ, CO, ID,
NM, UT, WY & EL PASO*

No one gives you more multi-state anytime minutes and included features for \$39.99 a month. Guaranteed.
Call 1-888-STREAMS (787-3267) for details voicestream.com

VOICESTREAM STORES

Oremouth Shopping Center
Grant and Owen 319-3436
Footville Mall
La Cholla and I-40 297-3350
North Oracle
Oracle Rd. and Auto Mall Dr. 293-9630
San Clemente Center
Broadway and Alvarado 323-8033

AUTHORIZED DEALERS

A+ Communications
Active Connection
Advantage of Nogales
Advantage Wireless
2384 S. 4th Ave.
B Con Mall
Tucson Mall
929 E. University
5650 S. 12th Ave.
815 E. Price

The Phone Guy
Ultra Wireless
Wide Cellular of Green Valley
Wide Cellular of Nogales
Wireless Station
WOW Call Wireless



amazon.com

Office
DIRECT



The Activation Center
1-888-488-1022

*Coverage not available in all areas. This is not a representation of earnings. Anytime minutes quoted above are local anytime (pay no long distance or digital roaming charges) for calls made from the VoiceStream home digital service area in the states listed above. 600 anytime minutes plus 2000 nationwide weekend minutes for \$39.99/month local offer good only on new activations through December 31, 2000. One-year service agreement required. Weekends defined as midnight Friday through midnight Sunday. Receive 2000 nationwide weekend minutes each month for the first 12 months of service. Nationwide weekend minutes may be used to call any number in the U.S. from your VoiceStream home digital service area, with no long distance charges. Incoming and outgoing calls are rounded up and billed in full minutes increments from the time the network begins to process the call (before the call rings or is answered) through its termination of the call. All shared minutes must be used in the month provided and do not carry over. We guarantee that no other carrier gives you more unrestricted local minutes and included features for \$39.99 a month. Guarantee is based on competitors' published non-promotional consumer rates for unrestricted local service. Available terms, conditions, restrictions and long distance and roaming charges are additional. Our digital PCS system is not compatible with analog TTY which may delay or prevent emergency calls. Additional restrictions may apply. Call 1-800-933-8997 or use a VoiceStream representative for more details. When sharing minutes, all lines of service must be activated in the same VoiceStream minutes and must have the same billing address. The number of additional lines of service is limited to four. Minutes are shared between all phones on the account on a first come, first served basis. VoiceStream is a registered trademark of VoiceStream Wireless Corporation.

Unlimited calling to other Cingular customers at no additional charge.

Got so excited about this deal,
I sorta lost my head.

Folks, there's a new wireless company in town with 20 million customers nationwide.

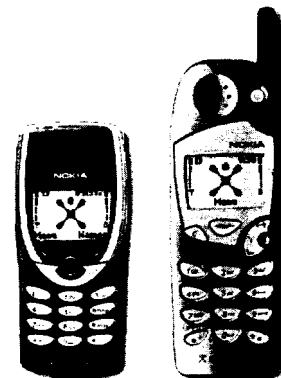
Cingular Wireless is the coming together of 11 companies, including Cellular One.

To kick things off, when you sign up with Cingular Wireless, you'll get unlimited calls to other Cingular customers in your home area. So you don't have to worry about your minutes running out. Plus, you can send unlimited text messages. All you have to do is activate a Cingular Home™ plan with access of \$29.99 or higher. So start gabbing, unlimited, with all your buddies. At no additional charge.

It's our way of making it easy for you to express yourself, 24/7.

	\$29.99	\$39.99	\$49.99
Home Plan:	225 minutes	400 minutes	650 minutes

Service offer available to new and existing customers.



Nokia 8260
\$99

Nokia 5165
\$19.99

with plans \$39.99 and higher after \$50 mail-in rebate

Pick one of these two Nokia phones.

NOKIA
CONNECTING PEOPLE

CELLULARONE is now a part of **cingular**™
WIRELESS

What do you have to say?™

1-866-CINGULAR
www.cingular.com

Available At:
Cingular Wireless Stores
ALEXANDRIA 703-834-2575
BEVERLY 703-489-5880
COLUMBIA 410-712-7870
FAIRFAX 703-834-2500
FREDERICKSBURG 540-842-4600
GAITHERSBURG 301-655-3867
MANASSAS 703-834-2525
RESTON 703-334-2550
ROCKVILLE 301-489-3510
VIENNA 703-418-0940
WASHINGTON D.C. 202-288-9884
Authorized Agents:
ALEXANDRIA A.S.A.P. Cellular 703-823-9435
Brix 703-923-0551
Cellular Phone Store 703-313-7599
Sears 703-914-2272
USA Telecommunications 703-922-9000
ANDREWS AFB 301-420-9341
ANNAPOLIS Cellular Center 410-264-1772
Fair & TV 410-224-9078
Keep in Touch Wireless 410-266-8665

ARLINGTON Mid-Atlantic Wireless 703-841-9111
Portables 703-415-2408
ARNOOLD 410-349-4800
ASHBURN Cellular Visions 703-729-7760
BEALTON S & M Video 540-439-1978
BERRYVILLE, VA Berwyn Auto 540-955-1292
BETHESDA ARS Comm 301-657-4217
Portables 301-770-4424
BOWIE Cell Comm 301-605-7800
BOLLING AFB USAF 202-563-3852
BOWNE Cell Comm 301-605-7800
BURKE Mid-Atlantic Wireless 703-764-2900
CALLAO N Neck Wireless 804-520-5521
CENTREVILLE Jungle Paging 703-830-1889
Portables 703-222-8888
CLINTON Cellular Center 301-856-0494
Lite Cellular 301-977-3263
COLUMBIA Brix 410-312-4858
Keep in Touch Wireless 410-884-3444
Portables 410-215-9448
CROFTON Cellular Center 301-261-6609

CULPEPER Connect Comm 540-825-8477
Lite Cellular 540-829-6500
DALE CITY Connect Comm 703-730-8527
DULLES Sears 703-380-2192
EDGEWATER Cell Comm 301-261-7000
FAIRFAX Brix 703-212-3422
Jungle Paging 703-363-4023
Keep in Touch Wireless 703-357-2404
Sears 703-900-6540
FALLS CHURCH Sears 703-531-4945
FORT BELVOIR USAF 703-281-0849
FORT MYER USAF 703-526-0878
FREDERICKSBURG Comm Specialists 540-373-0778
Brix 540-786-4384
Lite Cellular 540-891-0080
Mid-Atlantic Comm 540-371-6261
Portables 540-785-8880
FRONT ROYAL Lite Cellular 540-635-1221
Nestor Systems 540-635-9700
GAITHERSBURG Cellular Phone Sys 301-869-3700
Sears 301-843-5145

HERNDON All Wireless 703-478-3300
Mid-Atlantic Wireless 703-793-0700
HYATTSVILLE TST Cellular 301-891-7155
KILMARNOCK N Neck Wireless 804-435-0577
LAKE RIDGE Wireless Edge 703-491-5580
LANDOVER Sears 301-322-6377
LANHAM USAF 301-306-0055
LA PLATA Lite Cellular 301-909-5374
LAUREL Cell Comm 301-483-4700
Portables 301-419-0365
LEESBURG Cellular Visions 703-779-5744
Lite Cellular 703-779-1032
LOCUST HILL, VA TOPS 804-758-3205
LOUISA Lite Cellular 540-967-2900
MADISON Connect Comm 540-948-5744
MANASSAS AMCOM 703-631-1410
Lite Cellular 703-335-8797
Portables 703-392-8888
MARTINSBURG, WV Mid-Atlantic Phone 304-264-3600
Mid-Atlantic Phone 304-264-0622
Shenandoah Business Systems 304-263-4848
MCLAN Portables 703-693-7622
Washington Wireless 703-446-6000
OMANCOCK Fax TV 757-787-3403

ORANGE Connect Comm 540-672-9210
PETERSBURG, WV Western Auto 304-257-4711
POTOMAC FALLS Tel 703-421-0699
PURCELLVILLE Mid-Atlantic Phone 540-338-7800
ROCKVILLE Cellular Phone Sys 301-251-3700
Cellular Phone Store 301-184-4550
SEVERNA PARK Cellular Center 410-315-8058
SILVER SPRING Sears 301-754-1868
Steering Cellular 301-687-6668
SPOTSYLVANIA Lite Cellular 540-710-0042
SPRINGFIELD Portables 703-913-7777
Portables 703-924-9300
USA Telecommunications 703-423-9310
Wireless Edge 703-451-5505
STAFFORD Lite Cellular 540-720-6666
Lite Cellular 540-657-8703
STEPHENS CITY C-Comm 540-869-6605
STERLING Cellular Visions 703-378-0990
Cellular Visions 703-421-3500
UPPER MARLBORO Lite Cellular 301-524-8211
VIENNA All Wireless Comm 703-435-2202
All Wireless Comm 703-438-4400
VIENNA/TYSON'S Airtime Comm 703-912-1700
Portables 703-893-7622

WALDORF Brix 301-705-8837
Cell Comm 301-645-4445
Mobile Comm Sys 301-843-4740
Portables 301-396-4400
Sears 301-870-6376
WARRENTON Jungle Paging 703-830-1890
Lite Cellular 540-349-4000
WARSAW Upstate 304-333-5099
WASHINGTON, D.C. Inhome 301-883-2040
Portables 202-452-0000
Portables 202-347-5400
WHEATON Keep in Touch Wireless 301-942-3334
WINCHESTER C-Comm 540-662-6886
C-Comm 540-618-8990
Lite Cellular 540-678-4700
Mid-Atlantic Phone 540-678-3779
Rag Mountain 540-867-9878
WOODBRIDGE Airtime Comm 703-710-3938
Brix 703-680-1560
Portables 703-494-9002
Also available at:
WAL-MART **SEARS**
STAPLES **DIGITALONE**

Limited time offer. Service and promotional phone offers require a one or two year agreement and credit approval. Activation fee may apply. Promotional phone offer also available to qualified existing customers. Calls subject to taxes, long distance, roaming, universal service fee, or other charges. Package minutes apply to calls made or received within applicable calling area. Airtime in excess of any package minutes will be charged at per minute rate from \$15 to \$50. Airtime and other measured usage are rounded up to the next full minute at the end of each call for billing purposes. Unused included minutes do not carry forward to the next billing period and are forfeited. Digital Phone and Cingular long distance service required. Where offered, Unlimited Mobile to Mobile calling option only includes incoming and outgoing local calls to and from other local Cingular numbers that are within the same Mobile to Mobile Calling Area. Unlimited Mobile to Mobile does not include calls to 411, your own voice mail, or prepaid customers. The called party does not have Unlimited Mobile to Mobile calling option. Called party's package minutes will be deducted or called party will incur an airtime charge. Although service is available at our authorized agents, equipment availability and prices may vary. Offer available while supplies last. Certain other conditions and restrictions apply, see contract and store for details. Nokia, Connecting People, the 8260 and 5160 series phones are trademarks of Nokia Corporation and/or its affiliates. Cingular and "What do you have to say?" are service marks of Cingular Wireless LLC. © 2001 Cingular Wireless LLC.

OK

Communications works best when using two phones.

2 Internet-ready phones starting at \$49.99!

Limited time offer.



**March
Special!
Save
\$40!**

2 Internet-ready
i500plus phones for **\$49.99**

Sign up by March 31, 2001, and
choose from one option for both phones.

FREE Nextel OnlineSM

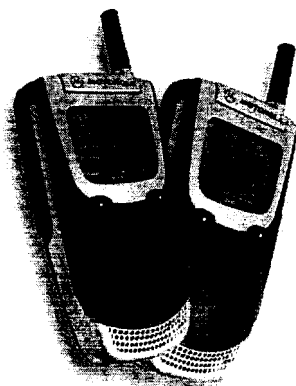
or

FREE nights and weekends

or

FREE long distance

Monthly Rate for TWO Phones	Number of Shared Cellular Minutes	Number of Shared Direct Connect Minutes
\$69.99	400	300
\$89.99	600	300



2 Internet-ready
i1000plus phones for **\$169.99**



**Nextel's 4-in-1 solution gives you more ways than
anyone to communicate with everyone.SM**

- Nextel Direct Connect[®]
(digital, two-way radio feature provides instant contact
and instant answers with the push of a button)
- Wireless Web Services
(including Nextel OnlineSM and Two-Way Messaging)
- Digital Cellular
- Text and Numeric Messaging

**There's never been an offer like it, so get to Ritz Camera today.
For the location nearest you, call 800•52•FOCUS**

Available at participating locations only. In-store activation may be required in select retail locations. This offer is for new activations prior to March 31, 2001. One-year promotional agreement and credit approval required. \$200 early termination fee applies. Equipment offers cannot be combined with any other offer. Phones must choose the same free option. Free option valid as long as you are on a shared-minute rate plan. Additional phones may not be added to these plans. Nights and weekends are from 8:00 pm through 7:00 am Monday through Thursday and 8:00 pm Friday through 7:00 am Monday. Nextel Online and Web browsing may not be combined. Other restrictions may apply. © 2001 Nextel Communications, Inc. All rights reserved. Nextel, the Nextel logo, Nextel Direct Connect, Nextel Online, More ways than anyone to communicate with everyone, and How business gets done are trademarks and/or service marks of Nextel Communications, Inc. MOTOROLA, The Stylized M Logo and all other trademarks indicated as such herein are trademarks of Motorola, Inc. Reg. U.S. Pat. & Tm. Off. All other product names and services are the property of their respective owners.

NEXTEL
AUTHORIZED RETAILER



- Speakerphone
- VibraCall® Silent Alert Ringer
- Missed Call Indicator
- Turbo Dial™ One-Touch Dialing
- Nextel Online™ Wireless Internet Services

Also Available Individually:
i1000 Plus Single **99"** #280730

for 1 year when you sign up for

- Unlimited Nextel Direct Connect*
- Unlimited Nextel Online Basic
- FREE Voice Mail
- FREE Caller ID
- Hurry in, offer expires March 31, 2001**

Includes
A Cigarette
Lighter
Adapter

Includes
A Travel
Charger

Includes
Two Carry
Holsters
with Belt
Clips

Includes
An
Instructional
Video

Activating Your Nextel Phone Is Easy...

**TTY/Your Phone
at CompUSA® &
Simply Take It Home.**

2 **Gather Important Information**
such as Your Driver's License
Number, Billing Address and Nextel
Phone Model.

Read the Terms and Conditions of Your Service Agreement.

4 Dial NEXTEL
Toll-Free to Activate
Your Phone.

Simply Take It Home.

Get Important Information
such as Your Driver's License
**Number, Billing Address and Nextel
Phone Model.**

**Read the Terms and
Conditions of Your Service
Agreement.**

Your Phone.

*\$99.99 per month + \$50 activation fee. **Unlimited Plan includes unlimited long distance calls and texts. ***Requires two year promotional agreement and credit approval. Available in select locations. See store for details and coverage. Limited time offer. The Nextel \$99.99 Unlimited Plan requires a two-year commitment. After the first year, the plan will automatically renew at \$149.99 per month. A \$50 early termination fee applies. Unlimited Nextel Direct Connect minutes refers to Nextel Direct Connect minutes only. Not applicable to other services. Coverage not available in all areas. ©2001 Nextel Communications, Inc. All rights reserved. Nextel, the Nextel logo, Nextel Online, More ways than anyone to communicate with everyone are trademarks of Nextel Communications, Inc. MOTOROLA, the Stylized M Logo and all other trademarks indicated as such herein are trademarks of Motorola, Inc. Reg. U.S. Pat. & Tm. Off. All other product names and services are the property of their respective owners.

SHARE AND SHARE ALIKE.

YEAH, WHAT SHE SAID.

New FamilyTime Plan with 3000 shared minutes

1000 Anytime Minutes **1000** FamilyTime Minutes **1000** Weekend Minutes

2 lines for just \$35 each

VoiceStream
WIRELESS

Get more from life.

NOW GET
2 phones for the price of 1

Call 1-888-STREAMS (787-3267) for details.

voicestream.com

Mid-Atlantic Neighborhood



INCLUDES LONG-DISTANCE AND DIGITAL ROAMING WITH N.C., MD., DE., N.J., PA., OH., NY & N.V.A. (area code 703)*

VOICESTREAM STORES

1850 K Street NW (DC) 202-223-3850
Ballston Commons Mall 703-276-1501
Fair Oaks Mall 571-432-0394
Springfield Mall 703-921-2045
Lakeforest Mall 301-987-2257
The Gallery Mall at Inner Harbor 410-519-0107
Owings Mills, Restertown Rd. (St. Thomas Shopping Center) 410-581-2300
White Marsh Mall 410-931-6980
The Mall in Columbia 410-730-0030
Annapolis-Jennifer Square 410-224-6755

NEW STORES

Montgomery Mall 301-365-4448
Townson Circle
(located behind Barnes and Noble)

GRAND OPENING

Arundel Mills Mall-Neighborhood I 410-799-3444

GRAND RE-OPENING

Rockville Pike 301-838-3453



AUTHORIZED DEALERS

METRO DC AREA

Always Mobile 202-526-7900
Central Paging 202-435-7754
Export Electronics 202-232-3743
Future Comm 202-546-8818
Future Comm 202-289-9060
Graffio Audio Video 202-244-9643
Wireless Paging & Cellular 202-296-8412
202-628-2337
Wireless World DC 202-775-8880
NORTHERN VIRGINIA
Cross Wireless 703-293-6202
Cross Wireless 703-823-1188
Cross Wireless 703-318-1600
Mobile Solutions 703-916-8366
Mobile Solutions 703-916-1834
National Comm 703-721-0200
National Comm 703-641-9600
National Comm 703-412-4373

National Comm

703-465-2274
Wireless Market 703-442-8185
ABC Net 703-256-2489
Digi-Tel 703-352-0203
Future Comm 703-642-8890
Halifax Center 703-560-1938
Quantis Comm 703-709-7300
Quantis Comm 703-920-9706
TDQ Comm 703-536-4200
Tetralink 703-814-4600
Tetralink II 703-827-2222
VHC Comm 703-532-9100
Wireless 2000 703-379-8484
SALTIMORE AREA
DigiCom 410-590-6660
410-686-5700
First Class Paging 410-625-1290
Inner City Records 410-444-3101
Metropolitan Wireless 410-247-3111
National Comm 410-590-1001

Telelink

410-525-2800
TDEC 410-446-2600
Telelink 410-571-9088
Telelink 410-263-6063
LAUREL/COLUMBIA AREA
DigiCom 301-953-7038
DigiCom 301-596-8888
MONTGOMERY COUNTY
301-881-4444
Cross Wireless 301-749-3400
Cross Wireless 301-907-9300
Mobile Solutions 301-767-3116
Alternative Comm 301-916-4300
Digi-Tel 301-424-2200
East West Comm 301-654-4300
Graffio Audio Video 301-907-3660
ITC 301-838-9080
Let's Connect 301-424-3005
Talk Unlimited 301-738-5678

Wireless

410-525-2800
TDEC 410-446-2600
Telelink 410-571-9088
Telelink 410-263-6063
LAUREL/COLUMBIA AREA
DigiCom 301-953-7038
DigiCom 301-596-8888
MONTGOMERY COUNTY
301-881-4444
Cross Wireless 301-749-3400
Cross Wireless 301-907-9300
Mobile Solutions 301-767-3116
Alternative Comm 301-916-4300
Digi-Tel 301-424-2200
East West Comm 301-654-4300
Graffio Audio Video 301-907-3660
ITC 301-838-9080
Let's Connect 301-424-3005
Talk Unlimited 301-738-5678

Wireless

301-869-7818
Telelink 301-309-9360
Telelink 301-448-6500
Wire USA 301-652-4802
Wireless 2000 301-840-2227
Wireless 2000 301-843-0089
Player's World Paging 301-773-8615
Telelink 301-918-9330
Wire USA 301-559-7600
Wireless 2000 301-322-4600
Wireless 2000 301-843-0089

amazon.com

BEST BUY

Office DEPOT

GSM GLOBAL NETWORK

*Coverage not available in all areas. Map is not a representation of coverage. Anytime minutes quoted above are local airtime (pay no long distance or digital roaming charges) for calls made from the VoiceStream (VS) home digital service area in the states listed above. 1000 anytime, 1000 FamilyTime, and 1000 local weekend minutes (best offer good until 3/25/01). Two-for-one phone offer refers to a mail-in rebate on purchase of qualifying phone and activation of VS service on qualifying rate plan. Qualifying phones: Ericsson 768 (\$49.99 suggested retail price, \$25 rebate), Nokia 6190 (\$99.99 suggested retail price, \$50 rebate) and Motorola 3682 (\$49.99 suggested retail price, \$25 rebate). FamilyTime plan requires two lines of service. All lines of service must be activated in the same VS market and must have the same billing address. Additional lines of service on a FamilyTime plan are \$10/month. Five lines max. Minutes shared between 2 phones on a first come, first served basis. One-year service agreement required. Receive 1000 local weekend minutes/month for the first 12 months of service. Weekends are defined as midnight Fri. through midnight Sun. FamilyTime minutes may be used to talk with other VS customers in your home calling area. Incoming and outgoing calls are rounded up and billed in half-minute increments from the time the network begins to process the call (before the call rings or is answered) through its termination of the call. All other charges are additional. Our digital PCS system is not compatible with analog TTY which may delay or prevent emergency calls.



headed wrong way.
way behind schedule.
will be working late again.

scheduling new pickups
through dispatcher with
at&t digital pocketnetSM service
way ahead of schedule.
will get home early.



AT&T DIGITAL POCKETNET SERVICE FOR BUSINESS

Get time-critical information when you need it with AT&T Digital PocketNet service for business. You and your drivers can exchange real-time wireless information about pickups and deliveries, as well as confirmations captured electronically with up to ten lines of screen text. Plus, you can get voice features like caller ID and a message waiting indicator. Combine AT&T Digital PocketNet service with AT&T Group CallingSM for one powerful voice and data package.